Submit within 45 days of well completion State of New Mexico						Revised November 6, 2013									
Energy, Minerals and Natural Resources					urces	1. WELL API NO. 30-015-33606									
Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505 HYDRAULIC FRACTURING FLUID DISCLOSURE Soriginal						Well Name: SOUTH CULEBRA BLUFF 23 #010 3. Well Number: 010									
										4. Surface Hole L Unit:P Lot:P Feet from:330	Section:23 T	ownship:23S	Range:28E		
										Feet from:330 5. Bottom Hole L		/W Line:E	10.000.00		
						□ Amendment						Unit:P Lot:P Feet from:330 Feet from:330 6. latitude:	N	ownship:23S VS Line:S :/W Line:E longitude:	Range:28E
												32.2	844755415905	104.050467	292728
						7. County: Eddy			7. ALHEE						
8. Operator Name and Address VANGUARD PER 5847 San Felipe, Houston 77057	RMIAN, LLC , Suite 3000				9. OGRID:	258350	10. Phone Numb	per:	832-327-2252						
11. Last Fracture Date: 4/4/2014 Frac Performed by: CUDD 12. F					12. Production O										
13. Pool Code(s): 40350						actured Interval: i.790 ft to 5.886 ft									
15. True Vertical Depth (TVD): 6,424 ft					16. Total Volu 30,	al Volume of Fluid Pumped: 30,118 gals cent of Re-Use Water in Fluid Pumped:									
17. Total Volume of Re-Use W N/A						Re-Use Water in F t Disclosed	luid Pumped:								
19. HYDRAULIC FLUI								10.0							
Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #		Maximum Ingredient Concentration in Additive (% by mass)		Maximum Ingredient Concentration in HF Fluid (% by mass)							
Water		Carrier / Base Fluid		7732-18-5			100%		85.29727%						
Sand Super DC/LC TLC/THS	Sandtrol	Proppant	Silicon Dioxide Silicon Dioxide	14808-60-7 14808-60-7			100% 97%		6.85424%						
Opti RCS	Salidiloi	Proppant	P/F Novolak Resin	9003-35-4			5%		0.34985%						
	4.1179	1 3771000	Hexamethylenetetramine 1009-7-0			1	1%		0.06997%						
B-15	Water Science Tech	Biocide	Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8			20%		0.00185%						
CS-14	Chemplex, L.C.	Clay Captrol	Water Non-hazardous salts	7732-18-5 Proprietary			80% 66%	20	0.00741%						
C3-14	Chemplex, L.C.	Clay Control	(Choline)				00%								
00.450			Water	7732-18-5		10	45%		0.01239%						
SG-15G	PfP Technology	Polymer	Petroleum Distillate (Mineral Oil)	9000-30-0 64742-47-8			50% 55%		0.26645% 0.29309%						
			Bentonite Clay	14808-60-7			2%		0.01066%						
	S. Carlo	2214 2 2 3 2 4 2 4	Surfactant	68439-51-0)	le.	2%		0.01066%						
XL-335	ASK	Crosslinker	Ethylene Glycol	107-21-1		· ·	25%		0.01978%						
			Potassium Hydroxide	1310-58-3			25%		0.01978%						
			Proprietary Proprietary	Proprietary Proprietary		V.	25% 15%		0.01978%						
			Proprietary	Proprietary			10%		0.00791%						
BC-1	Benchmark	Breaker Catalyst	Triethanolamine	102-71-6 111-42-2			100%		0.01006%						
			Diethanolamine			0	30%	8	0.00302%						
GB-2	Fritz Industries, Inc.	Breaker	Ammonium Persulfate	7727-54-0			99.9%		0.0102%						
NE-227	CESI	Non-emulsifier	Isopropanol	67-63-0		lv.	15%		0.01074%						
			Methanol Ethoxylated Nonylphanol	67-56-1		le.	15%		0.01074%						
Superset W	Santrol	Resin Activator	Ethoxylated Nonylphenol Methanol	9016-45-9 67-56-1		20% 50%			0.01432%						
	Santion	TOOM ACTIVATOR	Poly(oxyethylene)	9016-45-9		Y	54%		0.05984%						
			nonyphenol ether	3010-43-3			0.77		0.0550470						

E-mail Address: rhicks@vnrllc.com

NMOCD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.